

CLAIMS

1. A polypropylene-base molded article, which is a single-layer or multilayer molded article having a layer comprising a thermoplastic resin composition, wherein the thermoplastic resin composition contains a polypropylene resin composition (A) satisfying the following requirements and an ethylene-base copolymer (B) comprising an ethylene and at least one α -olefin having 4 or more carbon atoms:

the polypropylene resin composition (A) is a composition containing from 50 to 80% by mass of a polypropylene component (C) and from 50 to 20% by mass of a copolymer elastomer component (D) of propylene, ethylene and/or α -olefin having from 4 to 12 carbon atoms,

the melt flow rate is in the range from 0.1 to 15.0 g/10 min,

the content of the unit originated in the propylene in the copolymer elastomer component (D) is from 50 to 85% by mass, and

the xylene-soluble portion X_s satisfies the following requirements (I) to (V):

(I) the propylene content F_p is from 50 to 80% by mass,

(II) the intrinsic viscosity $[\eta]_{Xs}$ of the xylene-soluble portion X_s is from 1.4 to 5 dL/g,

(III) the ratio of the intrinsic viscosity $[\eta]_{Xs}$ to the intrinsic viscosity $[\eta]_{Xi}$ of the xylene-insoluble portion X_i is from 0.7 to 1.5,

(IV) the propylene content (P_p) of the high propylene content component as defined according to the two-site model is from 60% by mass to less than 95% by mass and the propylene content (P'_p) of the low propylene content component is from 20% by mass to less than 60% by mass, and

(V) the propylene content (P_p) of the high propylene content component as defined according to the two-site model, the propylene content (P'_p) of the low propylene content component, the ratio (P_n) of the high propylene content component occupying in F_p , and the ratio ($1-P_n$) of the low propylene content component occupying in F_p satisfy the following formulae (1) and (2):

$$P_p/P'_p \geq 1.90 \quad (1)$$

$$2.00 < P_n/(1-P_n) < 6.00 \quad (2)$$

2. The polypropylene-base molded article as claimed in claim 1, wherein the

refractive index of the xylene-soluble portion in the thermoplastic resin composition is from 1.480 to 1.495.

3. The polypropylene-base molded article as claimed in claim 1 or 2, wherein the amount of the xylene-soluble portion in the thermoplastic resin composition is from 20 to 70% by mass.

4. The polypropylene-base molded article as claimed in any one of claims 1 to 3, wherein in the thermoplastic resin composition, the ratio (MFR_A/MFR_B) of the melt flow rate (MFR_A) of the polypropylene resin composition (A) to the melt flow rate (MFR_B) of the ethylene-base copolymer (B) is from 0.3 to 3.0.

5. The polypropylene-base molded article as claimed in any one of claims 1 to 4, which is a multilayer polypropylene-base molded article and further has a layer comprising a polyolefin-base resin.

6. The polypropylene-base molded article as claimed in claim 5, wherein the polyolefin-base resin is a polyethylene-base resin.

7. The polypropylene-base molded article as claimed in claim 6, wherein the polyethylene-base resin contains 15% by mass or more of a high-density polyethylene.

8. The polypropylene-base molded article as claimed in claim 6, wherein the polyethylene-base resin comprises substantially only a high-density polyethylene.

9. The polypropylene-base molded article as claimed in any one of claims 1 to 8, wherein the thickness of the layer comprising a thermoplastic resin composition accounts for 40% or more of the entire thickness.

10. The polypropylene-base molded article as claimed in any one of claims 1 to 9, which is produced by a multilayer co-extrusion water-cooling inflation molding method or a multilayer co-extrusion T-die casting method.

11. A container comprising the polypropylene-base molded article claimed in any one of claims 1 to 10.
12. The container as claimed in claim 11, wherein the container comprises a multilayer polypropylene-base molded article and the outermost layer is a layer comprising a polypropylene resin composition or a propylene- α -olefin random copolymer.
13. The container as claimed in claim 11, wherein the container comprises a multilayer polypropylene-base molded article and the outermost layer is a layer containing a polyethylene-base resin.
14. The container as claimed in claim 13, wherein the polyethylene-base resin contains 15% by mass or more of a high-density polyethylene.
15. The container as claimed in claim 13, wherein the polyethylene-base resin comprises substantially only a high-density polyethylene.
16. The container as claimed in any one of claims 11 to 15, wherein the container comprises a multilayer polypropylene-base molded article and the innermost layer is a layer containing a polyethylene-base resin.
17. The container as claimed in claim 16, wherein the polyethylene-base resin comprises substantially only a high-density polyethylene.
18. The container as claimed in any one of claims 11 to 17, which is a medical container for housing a medical substance.